Financial Reporting Standards and Cost of Waters in Corporate Organization

Adeseola Adebayo Akande

Abstract-This paper examined costs of waters and its disclosures propensity in financial statement of corporate organizations with a view to advocate for a suitable reporting standards globally. International Accounting Standard Board has not specifically announced or produced any financial reporting standard in support of reporting cost of waters despite the huge amount of monies that some corporate industries incurred on it. Both primary and secondary data were sourced from six breweries that uses water as one of their major raw materials and analyzed through descriptive statistics techniques of Analysis of Variance (ANOVA) and Simple Percentage Method (SPM). The result revealed that there were significant relationship between earnings and cost incurred on waters by some specialized industries like breweries, juice manufacturers and food processing companies in Nigeria and as such affects the earning potentials of the organization. On the average, water cost showed p-value of (0.04) > (0.05) level of significant in and p-value of (0.18) >(0.05) level of significant when reported differently from environmental costs. The result obtained from (80.1%) of the corporate affair section of six breweries and 65.7% professional accountants judgement from selected districts of the Institute of Chartered Accountants in Nigeria showed that there are urgent needs to provide for a separate standard of reporting such cost especially for specialized industries that uses water as their major input/raw material in their production. The study concludes that reporting cost of waters separately will project the principles of IFRS as prescribed by the board. Thus, the basic principles of human rights, cost standardization, environmental pollution protection and treatment-costs could be accounted for and reported in all the continent of the world. Based on this, the study recommends that accounting standards making bodies need to give cost of waters adequate consideration with allotment of appropriate standards for disclosure and reporting of costs of waters for all corporate organization world-wide to allign uniformity in financial reporting.

Index Terms—Waters, Breweries, IFRS, IASB.

I. INTRODUCTION

Generally, water is a clear, colourless, tasteless and odourless liquid made up of hydrogen and oxygen. It is a binary compound that occurs at room temperature and are majorly in form of salt water and fresh water. Water serves as a raw material in form of two molecule of hydrogen bounded to one atom of oxygen with chemical symbol of H2O. It often contains a wide range of organic and morganic materials in solution or suspension form. The importance of water cannot be undermined in any life, it is a must for human body for cells, organs and tissue growth and temperature regulation. Water may be lost from a living body through breathing, sweating and digestion Thus, it becomes imperative for a living being to dehydrate through drinking of a clean water and eating of foods that contain waters. Apart from this, water is often seen as major raw materials for some specialized industries especially the liquid based product producing companies like breweries, drug producing companies and diary-products companies. It can as well be seen as a source of power, energy and heat regulators in industrial machines. Invariably, this resources called water has implicit costs that must be accounted for differently from environmental or miscellaneous costs as the basis of reporting it in most of corporate organization financial statements.

The historical development of Accounting attests to the fact that Accounting is a product of its commercial environment and rooted in capitalist ideology. Accounting has scarcely dropped the vestiges of Pacioli's commercial capitalist era. This disposition of accounting has meant that it evolves round its component resources within the ecosystem to the extent that a wide rift now exists between accounting earnings and its material costs/ expenses. In the recent times there has been an increased awareness of the interaction between firm's earnings and window dressing accounting where most of the costs components are lumped together so as to hid true profit made in a particular period of time. Water uses tend to be free from nature or insignificantly rewarded by the users especially the environment in which the source could be traced to. There is definitely lack of enlightenment by the host community from where major users of waters derived this resources. This enlightenment has been sharpened by concerns about resources depletion, resources scarcity, environmental degradation and the activities of these firms that lead to the depletion of the ozone layer and thereby causing an imbalance in the environmental system. The increasing concern about the success or failure of a company may be determined not only by the products or services it deals with but also by the complexity of it raw materials. The present civilization has involved us in varied activities. Many of these activities generated waste with potential constituents. The ultimate disposal of the waste through water lead to environmental pollution in many parts of the world, the magnitude of pollution of the environment has already reached an alarming level that need to be accounted for (Pramanil, Shiland Das, 2007). Environmental accounting is an inclusive aspect of accounting. It generates reports for both internal use, providing environmental information to help make management decisions on controlling overhead, capital budgeting and pricing, and external use, disclosing

Published on May 22, 2020.

A. A. Akande, Department of Accounting and Finance, Faculty of Humanities, Social and Management Sciences, Elizade University, Nigeria. (e-mail: adesola.akande@elizadeuniversity.edu.ng)

environmental information of interest to the government, public and to the financial community. Cost of water and its effect in the immediate environments are regulated through environmental laws and corporate social responsibility (CSR) disclosure. Extant literature revealed that there is neither IASs nor IFRSs by IASB that addresses measurement and disclosure of full costs of water in financial reporting of corporate organizations. Also, there is neither guiding local standard from Financial Reporting Council of Nigeria nor Generally Accepted Accounting Principles (GAAP) on full water costs measurements and disclosure in financial reporting by local firms that rely heavily on water usage. Water itself is essential in the economic productivity and activities of corporate organizations which major line of business hinges on it. Water is a key element which firms in the production of food and beverages, power generation, semi - conductor, textile paper and pulp processing, oil drilling, mining and other metal companies depend on largely (Raj, 2015). The importance of water to animals, vegetation, human and corporate organizations in the light of water scarcity in different regions of the world cannot be over emphasized. Demand for quality and adequate water supply in the face of water shortages is on the ascendancy in varying countries and continents in the world. Scarcity of water in some regions of the world, particularly in developing countries is gradually making water an economic good and sustainability of water based product producing companies. It is obvious that water is fast becoming a commodity to be paid for and traded in a manner similar to oil, gas and gold. This is why the United Nation in its recognition of water, has set a day aside to mark water day globally on a yearly basis.

In the view of Remali, Husin, Ali and Alrazi (2016), scarcity and low supply of quality water has remained a fundamental ecological challenge in some countries especially in Asia continent where recycled water becomes the order of irrigation and human consumption. In some of these countries, water scarcity and contamination is causing a lot of diseases to human, animals and adversely affecting corporate operations. Hence, Mudd (2008) states that consumption of toxic water can adversely affect animals and humans in the environment. Raj (2015) posits that too low water supply and water contamination can pose serious human health and future economy challenges. While most firms are mandated to stick strictly to environmental laws that seek to mitigate contamination risks common with operations such as mining, water quality and its cost reporting has remained a major concern among local stakeholders (Miranda, Sauer & Shinde, 2010). The economic implication of water and the associated risks informs the need for organization to account for its costs differently to allow for consistency and prudence in financial reporting of specialized organization that uses lots of water as part of their raw materials, hence this study.

II. THEORETICAL FRAMEWORK

In recent times, opinions abound that costs related to water be treated as full cost in financial reporting. The intention is to ensure that the peculiar challenges associated with water usage is treated and accounted for. In doing this, Accountants in the organization has a professional role to play so as to ensure the costs related to corporate waters used, using defined accounting principles, conventions, rules and standards in reporting the specific costs instead of lumping them up as environmental cost in the financial statements. However, there are divided views on how costs related to water in a corporate setting should be recognized, measured and reported giving different background and uses to which water was put. Renzetti and Kushner (2004) assert that it is unclear how estimates, measures and changes associated with water costs in corporate organization that mostly use high volume of water in productions should be accounted for. This is so because there are no available accounting standards (IASs and IFRSs) which spells out the manner the financial costs of water should be reported. This puts the accountants in the organization in a dark spot on financial treatment of full costs related to water. The only possible escape route for the accountant in the absence of accounting standards is to recognize and treat water costs as administrative expenses. Hence, Renzetti and Kushner (2004) see accounting for water utility in corporate organization as somewhat incomplete. As noted also by Christ and Burritt (2017a), to date, there is no commonly applied framework by which corporate water accounting can be assessed with respect to how decision – making might be enhanced, economic efficiency improved and social and environmental damage avoided in line with prudence convention in accounting.

Cost of water and its accounting issues in companies are commonly included in environmental costs, featuring under corporate social responsibilities (CSR). For example, the spillage of water from a company pollutes the immediate environments and huge costs are always involved when there is crisis even in the normal situations provisions are always made which always sooth up the reported expenses of oil and gas companies cost in the Niger Delta region of Nigeria. The effect makes stakeholders to demand for social benefits from companies operating in the oil and gas industries in the Niger Delta zone of Nigeria.

Accounting for water costs goes beyond payment for spillage or damages caused by water in some region but a constant material to industries that produces beer - breweries and drinking products producing companies all over the world. Environmental accounting and reporting was first enunciated by Carroll (1999) under four kinds of primary responsibilities which encompasses economic, legal, ethical and philanthropic responsibilities costs. The environmental accounting from which corporate water accounting is derived is a primarily concerned with a firm's economic productivity which is basically the prime objective of most corporate businesses which depend on water usage.

Adhering to legal regulations including corporate water legal regulations and frameworks largely constitutes a corporation's legal responsibility. Ethical responsibility concerns the obligation of doing the right thing, ensuring that all business operations are within ethical bonds, regardless of legal requirements (Raj, 2015), contravention of this legal responsibility is one of the causes of the call for a company's philanthropic responsibility by way of social engagement and involvement with local issues related to the business. One of the key areas in philanthropic responsibility is the need to effectively report on corporate water in the satisfaction of shareholders and other stakeholders in companies. Although water accounting may have been a concern and somewhat applicable in public authorities like irrigation authorities and water utilities board such as water board management in the context of Nigeria, its focus is gradually on privately owned businesses in varying sectors of an economy and quoted firms inclusive. Similarly, in extant literature, there appears to be a near void of academic studies on corporate water accounting (Christi & Burritt, 2017a).

A. Water Accounting

Water accounting is otherwise referred to as micro account which involves information about quantities in terms of water scarcity (both surface and ground water sources) water efficiency, water surpluses and water management opportunities as well as information on water quality (Christ & Burritt, 2017a). Water accounting is about understanding the hydro-logical cycle, assessing spatial and seasonal variations in rainfall with unpredictable extremes of floods and droughts. It takes into account medium and long-term changes in demand across all water users farming, energy, industry, communities, and the environment - and inform water infrastructure investment such as pumping, storage, and planning for climate change. Corporate water accounting is the metric for better corporate water management (Christ & Burritt, 201a). The study and practice of providing information to improve water management by business is commonly refers to as corporate water accounting (Morrison, Schulte & Scheneck (2010 A similar definition is also used to describe the activities of disclosure as the act of collecting and making available data on the current state of water management [Morrison & Schulte 2012). Accounting for water can be considered as a vehicle, or a mechanism, through which water users can discharge accountability (Russell & Lewis, 2014). Water accounting represents a relatively new field of domain and space in the management and accounting disciplines (Tello, Hazelton, & Cummings, 2016; Hazelton 2013).

In developing countries, corporate water accounting appears to be an uncommon area of theoretical debates and empirical investigations. Corporate water accounting may not be gaining attention in developing counties perhaps due to non – availability of generally accepted water accounting standard, culture and nature of environment, poor knowledge of huge costs associated with waters standard and its application in reporting the related economic activities. A comprehensive application of water accounting is never without raw data (raw facts) on both water accounting and quality (Christ & Burritt, 201a). This is one of the reasons recent studies have beamed attention to the very essence of and need for monetary information on industrial waters (Burritt & Christ, 2017b).

While there is heighten interest on corporate water accounting globally in recent times, indications there are that this research area is not without associated problem and thus remained a much research area of investigations by future researchers (Christ & Burritt, 2017a). They stressed that till date, corporate water community has remained fragmented and divided. Furthermore, Christ and Burritt (2017b) state that although new water accounting tools have been developed and released, most of them have been aimed at creating niches and often times geared towards profits appreciation as well as creating standards for organization in the likes of the international organization for standardization (ISO, 2014. Despite several initiatives to decrease water crisis facing business, uptakes of corporate water accounting is lower than would be expected (World Economic Forum, 2018).

In some developed countries for instance like Canada, every provider of water and waste water services are mandated to provide two plans for the approval of the government. The first plan is to assess the infrastructure for water and documents full costs of services which among others, encompass source protection, operating, financing, renewal, replacement and improvements. The other plan required for government approval is a cost recovery plan that sets out how the water utility has to be implemented. Despite these clear mandatory requirements, a number of challenges have continued to adversely affect the adoption of full costs report on related corporate organization. Some of these peculiar challenges include the lack of accepted definition and methods and limited empirical studies of the implications for corporate water accounting (Renzetti & Kushner, 2004).

B. Emergent of Water Accounting

Corporate water accounting emerged in the 2000s as a response to concerns over mismanagement of water resources by business and recognition that the future would see periods of water shortage become frequent and severe (Chapagain & Tickner, 2012). Overtly and covertly, frequent water shortage and severity always emanates from water mismanagement and policy in corporate organizations. In the view of Signori and Bodino (2013), mismanagement of water arises due to over exploitation of surface and ground water sources and concerns with water quality, often made worse by overdrawing existing fresh water supplies that exceed recognized recharge rates and the minimum flows needed to preserve biodiversity and healthy riparian and surface water systems. To effectively manage water resources, companies need access to appropriate information (Christ & Burritt, 2017a). Although macro level techniques for managing water have been in place for sometimes (Vardon, Bumett & Dovers, 2016). As a different and unique area of interest, Morrison et al. (2010) emphasized that corporate water accounting recognizes that companies have varying motivations that require different types of data. Developments in water accounting have been driven by several groups (Christ & Burritt, 2017b). They note that academics in the clear picture of analysis have played an important role in corporate water accounting. For example, one of the pioneers in corporate water accounting was an academic, in the person of professor. Tony Allan, who founded the virtual water concept. The water concept sought to demonstrate the amount of water embedded in different products. In this case, Allan (1998) argued that if water is used at different stages of production, then trade in the final product can be seem as trade in water that needs to be accounted for. Other contributions to emergent of water accounting is integrated water resource management and life

cycle assessment (Christ & Burritt, 2017a). Corporate and NGO sectors have not been silent on water issues. This has caused a lot of public - private partnership to emerge. In terms of the development of corporate water accounting, the world business council for sustainable development has been instrumental. For instance, it produced an interactive platform for corporate water accounting initiatives. Prominent among the initiatives is the CEO water mandate launched in 2007 at the UN Global leadership forum (Lambooy, 2011). The aim of the initiative is promoted water stewardship the initiative is currently being endorsed by over 130 companies worldwide, including Coca-Cola, unilerve, Woolworths and SABMiller (CEO water mandate, 2017). It is therefore suggested that the International Accounting Standard Board should urgently develop an accounting framework that would guide financial statements preparer on full water cost reporting globally in a uniform manner.

C. Justification of Separating costs of Water in Financial Reporting

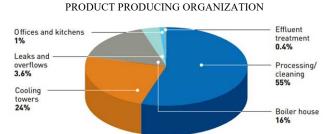
Cost of water and its reporting in financial statement of corporate organization can be classified into macro and micro levels. Corporate water cost is basically at the national and global levels. The macro water has drawn the attention of policy makers and researchers in recent times. It is commonly embodied in and applied using the United Nations Integrated System of Environment - Economic Accounting (SEEA) (Borrego-Martins, Gutierrez-Martin & Berbel, 2016). Globally, Australia is one of the countries that has led the development of water accounting. It has successfully undertaken this through the Australian Bureau of Statistics with its concentration on SEEA - based water accounting system and a physical National Water produced by the Bureau of Meteorology (Tello & Hazelton, 2018). It is the Bureau of meteorology in National Water that develops and uses Australian Water Accounting Standard number one (AWASI). The Australian Water Accounting Standard number one (AWASI) is a general - purpose water accounting (GPWA) standard. GPWA is primarily founded on principles of financial accounting (Christ & Burit, 2017a). Although there are tendencies that corporate businesses might always fall back to the use of the Australian Water Accounting Standard number one (AWASI), the research on the general - purpose water accounting is little globally (Tello & Hazelton, 2018).

On the other hand, micro level of water accounting is otherwise referred to as corporate water accounting. It is an umbrella term that incorporates a collection of methods and tools of reporting financial transactions principally for business corporations. Examples of these methods and tools encompass the World Business Council for Sustainable Development Global Water Tool (WBCSD, 2018), various water foot print methods such as ISO 2014; Water Footprint Network (2018) and other initiatives which overtimes have been developed by Non-governmental Organizations (NGOs) and industry associations (WBCSD, 2012) views need to be assembled by the Board to formulate a uniform standard that will enhance uniform in reporting of water cost for all organization..

D. Reporting cost of waters in organization

Corporate water cost accounting purpose is to provide sound and reliable data and information as the foundation for good water governance. The objective of corporate water accounting is to provide bases for prudent decision to inform sound water - related decisions (Christ & Burrit, 2018). According to Hoekstra (2017), Morrison, Morikawa, Murphy and Schulte (2009), this information can be used for a range of purposes which include the assessment of risks, especially financial, operational, product, reputational, regulatory and supply chain risks. This will bring in improved decisions by corporate organizations which can further lead to more sustainable management (Christ & Burritt, 2018) and premised on ad hoc examination of water resources importance, its value creation potentials can be reasonably measured, accounted for and disclosed for more lucidity in income reporting. This will pave way for water accounting together with water auditing to improve understanding of the 'cost composition' which is the basis of establishing the net income of an organization in a reporting period and as such, the level of water governance needed to deliver sustainable water services; and the water implications of delivering and achieving all Development of corporate water accounting standard and international financial reporting standing by IASB through the instrumentality of the professional accountants could create a common 'water' language and understanding among water managers and stakeholders globally. This could influence investors to invest in companies in water and mining business, thus enhancing firm market value and economic activities.

Accounting for cost of water seems to be an integral part of the social accounting tradition. Water, which is the most important resource for the survival of human and nonhuman life on the planet (Bergoglio, 2015), and the issues related to its "management" and "control" have implications that affect the economic, ecological and social dimensions. As is widely known, financial accounting is aimed at providing all stakeholders with a specific attention to the investors' information about the economic/financial results and the survival/development prospects of the business. Financial reporting does not measure the impacts of the organization activities that have not direct or indirect market values, with all the limitations of accounting principles and legislations but annual financial reports guide prospective investors and other stakeholders. Reporting cost of waters differently will give more understanding and elucidations to the structures of expenses and the resulting net income which will further guides tax payment and its associated remittance of returns to the appropriate authorities in the economy and other distributions of benefits to all stakeholders. Omnibus presentation of costs related to waters as environmental costs or administrative costs will always create a mismatch of accounting information which its recycling may not only reduces water footprint, but the cost of this recycled usually may be much lower than that of mains water costs, hence there is a significant cost saving to be had when this is reported differently in the financial statement of an organization.



III. COMPOSITION OF WATER USES OF WATER BASED

Fig. 1. Water Consumption in the Food and Drink Industry

Recognizing the True Cost of Water may help business decision-makers to understand the importance of water risk and the benefits of investing in sustainable strategies such as water reuse and wastewater resource recovery. It means that return on investment is no longer simply based on current costs, but takes account of real risk-based costs. Water conservation is in everyone's interest and sustainable water management is not only good for the company's image, it can make a real difference to the bottom line. On the other hand, social otherwise refers to as environmental accounting provides a strong foundation for justifying the role and potential contribution of water accounting (Hopwood, 2009). In much of the SEA tradition, impacts of the business's activities on stakeholders are seen in a synergic way, where the economic, social and environmental effects are intertwined and, in many regards, integrated. From this perspective, an "accounting" which is able to provide techniques for accounting for and controlling the interrelated aspects related to water seems to share many of the characteristics of social and environmental accounting (Russell & Thomson 2009; Bebbington et al., 2014). In this sense, therefore, water accounting could be considered as an extension and enlargement of the traditional social accounting with a specific focus and emphasis on water and its management-related issues. Thus, developing a suitable accounting standard by standard setter over water costs and its reporting may not be out of scope if critically looked into as this would go a long way to assist professionals to identify cross-sector cost problems in corporate organizations. Also, understanding of water cost reporting standard by the accountants will assists the external auditors in water auditing and further enables informed financial reporting.

IV. DATA ANALYSIS AND FINDINGS

Since the emergent of corporate water accounting in 2000s, there has been growing numbers of empirical quests to present costs related to water differently by some researchers. For instance, Remali, Husin, Ali and Alrazi (2016) undertook an exploratory study on water reporting among top ten (10) Malaysian public listed companies based on market capitalization and water risk profile. They employed content with empirical finding that reveals that water related disclosure is still fairly low among the ten (10) companies with most of the information scoring only '1'. A study conducted by Weber et al. (2005), comparing 100 companies on the association between corporate water accounting and financial performance, reported a significant

positive result while the study outcome of Morrison et al. (2010) points out that corporate water accounting impacts on the financial position of organizations, particularly in the long – run, thus making the inclusion of monetary data on corporate water cost an area to look at by accounting scholars until thea reporting concensus is formed globally.

In Nigeria, there is no specific pronouncement or reporting on costs of water either industrial or fresh water usage and as such questionnaires are administered on two group of people – the social responsibility department staffs, the accounting section of six breweries in Nigeria and professional members of the Institute of Chartered Accountants of Nigeria which is a functioning members of the IASB in six different districts in Nigeria on the procedures of reporting cost of water used in production of beer and malt products and professional opinions on reporting these costs differently from the normal old way since year 2000.

From the data collected and analyzed, out of more than eleven breweries in Nigeria, six were studied through examination of their financial reporting presented from year 2015 to date and questionnaires administered on the staff from Corporate affair section, accounting section and production department, it was discovered that all the selected Breweries passed the litmus test of having brewery company status before year 2000, that their financial statements are published as required by law and that they use water as one of their major raw material. The examination of their financial statement reveals that there were no separate head of reporting costs /expenses on water and that it would be practically impossible for any users of accounting records to trace this cost as only costs that were reported includes Cost of sale: traceable to IFRS 1, administrative expenses, marketing and distribution expenses and tax expenses. This reporting position is what is found with all the breweries, implying that all ingredients of making their products has been reported under administrative cost and as such cost of water and other materials that form their product are lumped together. one, salient areas of differences between old ways of presenting financial reports and the provision made by the new standards (IFRS) and the former General Accepted Accounting Standards showed that preparers of account need to focus on cost concept in reporting their activities financially if users of the statement are not meant to be in the dark.

For adoption and training purposes, coming up with a specific standard on reporting various cost of raw materials as obtains in the manufacturing companies accounts will create a derived and desired benefits. Benefits derivable if the provisions are properly keyed into will includes decrease in cost of capital, efficiency in capital allocation, international capital mobility, increased market liquidity and value, comparability enhancement and improved transparence of results of operations. Thus the adoption of IFRS in developing economy along this line will avail breweries the benefits that ranges from promotion of provision of meaningful data on their performance thereby encouraging comparability, transparency and lower cost for potential investors.

Need for Separate Reporting Standards for Cost of Water and Performance indices effects. (Profitability, liquidity and investors activities ratios) in line with compliance with the requirements of IFRS showing mean and median comparison of the collected variables from 2015 to 2019 of the selected

breweries were as presented below:

TABLE I: DESCRIPTIVE STATISTICS OF IMPART OF SEPARATE IFRS ON COST OF WATER FROM 2015-2019 (N=50)

Variable	Mean	Std. Deviation	on Sk	<i>wewness</i>	Kurtosis				
B12	2.980	1.921		- 007	-2.00				
B13	3.880	1,136		-702	552				
B14	4.100	0.650		-600	1.37				
B15	4.600	1.800		0.25	7.18				
B16	2.710	0.570		-1.97	-1.819				
B17	4.720	0.810		-2.70	2.94				
	MV	EPC	ENP	BIO	WSM	AWR	ERD	CEL	SIZ
Mean	1.4732	0.7554	0.2832	0.6537	0.6392	0.1283	0.3849	0.0314	1949774
Median	1.1600	1.0000	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	4896443.
Maximum	12.570	3.0000	3.00000	3.0000	3.0000	3.0000	3.0000	3.0000	2.15E+0
Minimum	0.1200	0.0000	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	99836.00
Std. Dev.	1.0570	0.7794	0.63063	0.9772	0.9644	0.4520	0.7628	0.2341	3261639
Skewness	4.2503	0.7322	2.25131	1.22	1.2275	3.6749	2.0496	8.8679	2.7048
Kurtosis	35.938	2.8430	7.32435	3.1352	3.1512	16.011	6.4214	91.4183	11.111
Beta-value	19913.8	37.326	670.671	102.89	104.11	3843.0	490.61	139945.3	1635.97
Probability	0.0000	0.0000	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sum	608.46	312.00	117.000	270.00	264.00	53.000	159.00	13.000	8.05
Sum Sq.	460.33	250.30	163.854	393.48	383.24	84.198	239.78	22.590	4.38E+1
Observation	413	413	413	413	413	413	413	413	413
Cross secti	50	50	50	50	50	50	50	50	50

Source: Author's Computation 2020

			TABLE II: REGRESSION RESULTS										
stimated pefficient	Standard error	T statistics 1.97	P value 0.04										
2	Adjusted R squared	Standard Estimate of regression											
.86	0.73	0.8183											
2	efficient 2	Defficient Standard error 2 Adjusted R squared	Defficient Standard error 1 statistics 1.97 2 Adjusted R Standard Estimate squared of regression										

Source: Researchers computation with E-views Software, 2020

The results of OLS shows a p-value of 0.04 > 0.05 level of significance which implies that creating a separate IFRS for cost of waters reporting will have significant impact on the earnings of the firms in this sector of economy. As could be viewed from the table below which shows the descriptive statistics of the impact of creating separate IFRS on the cost of water reporting and performance indices of selected firms from the date of its emergency (2000) to date. From the analysis, the result in orderly form showed - B17 with a mean value of 4.72 and the highest, B15 mean value of 4.60 and of B18, B14. B13, B12 and B16 with mean values of 4.580, 4.10, 3.88, 2.98 and 2.710 implies that adoption of separate IFRS will improve transparence, provide greater opportunities that will further enhance reporting of performances of water based company's financial reporting. Complimenting this position with the response from professional Accountants majorly from different ICAN districts in South West geo-political zone of Nigeria shows that it will not be out of order if separate accounting standard of reporting cost of water is produced by the IASB. And that this will not only be useful reporting guides in Breweries but to all entities that incurred great cost on water usage including incidental water caused costs nationwide.

V. CONCLUSION AND RECOMMENDATIONS

The study, having explored the view of major users of water as their input material, corporate affair subsection of the selected breweries, account section and views of professional Accountants submitted to the fact that creating separate accounting standards to report cost of water may not be out order in line with prudence, cost concepts and objectivity in reporting material costs of a business entity so that problems of lumping costs of values together will be minimized. It also established that there is deficiency in the international accounting standards (IASs) and international financial reporting standards (IFRSs) in the recognition, measurement and disclosure of full costs of water in related organization.

References

- Ahmad, R.A.R., Tower, G., Plummer, J., & Aripin, N. (2012). Transparency and clarity of water accounting reporting. European Accounting Association Annual Conference, Uk.
- Allan, A. (2012). The role of a water accounting system in the avoidance and resolution of international water disputes, in Godfrey J., Chalmers K. Water Accounting. International approaches to policy and decision making, pp. 236 -254, Edward Elgar Publishing Limited, UK.
- Bergoglio, F. (2015). Laudato Si del Santo Padre Francesco Sulla cura delta casa comune, Lettera Enclelica, Libreria Editrice Vaticana.
- Borrego-Marin, M.M., Gutierrez-Martin, C., & Berbel, J. (2016). Water productivity under drought conditions estimated using SEEA-water. *Water*, 8(4), 138-151.
- Cashman, A. (2011). Our Water supply is being managed like a rumshop: Water governance in Barbados. Social and Environmental Accountability Journal, 31(2), 155-165.
- CEO Water Mandate (2017). The CEO water mandate, viewed 23 December 2017 http://ceowatermandate.org/
- Chalmers, K., Godfrey, J.M., & Lynch, B. (2012). Regulatory theory insights into the past, present and future of general purpose water accounting standard setting. Accounting, Auditing and Accountability Journal, 25(6), 1001-1024.
- Contrafatto, M., & Signori, S. (2012). Responsabilita, accountability e sostenibilita aziendale: alcune riflessioni, in Rossi C., Rusconi G., Servalli S., Saggi di storia delle discipline aziendali e delle dotthne economiche, Rirea, 309 - 326.
- Dakata, M.N., & Hasnah, K. (2016). IFRS adoption and earnings management: moderating role of institutional ownership in Nigeria. *International Journal of Management Research & Review*, 6(2), 1685 – 1691.
- Daniel, M., & Sojamo, S. (2012). From risks to shared value? Corporate strategies in building a global water accounting and disclosure regime. *Water Alternatives*, 5, 636-657.
- Egan, M. (2014a). Driving water management change where economic incentive is limited. *Journal of Business Ethics*, 132(1), 73-90.
- Ercin, A.E., Aldaya, M.M., & Hoekstra, A.Y. (2011). Corporate water footprint accounting and impact assessment: the case of the water footprint of a sugar-containing carbonated beverage. *Water Resources Management*, 25(2), 721-741.
- Gibassier, D. (2018). Corporate water accounting, where do we atand? The international water accounting field and French organizations. Advances in Environmental Accounting and management, 7, 31-65.

- Hoekstra, A.Y. (2017). Water footprint assessment: evolvement of a new research field. *Water Resource Management*, 31, 3061-3081.
- Hopwood, A. G. (2009). Accounting and the environment. Accounting, Organizations and Society, 34(3-4), 433-439.
- ISO (2014). ISO 14026: water footprint: requirements and guidelines, International organization for standardization, Geneva.
- Money, A. (2014). Corporate water risk: a critique of prevailing best practice. Journal of Management and Sustainability, 4:42-59.
- Morrison, J., Morikawa, M., Murphy, M. & Schulte, P. (2009). Wafer scarcity & climate change. Growing risks for business and investors, Pacific Institute, Oakland, CA.
- Morrison, J., Schulte, P., & Schenck, R. (2010). Corporate water accounting. An analysis of methods and tools for measuring water use and its impacts, Pacific Institute, Oakland, CA and UNEP DTIE.
- Rogers, P., Silva, R. de., & Bhatia, R. (2002). Water is an economic good. How to use prices to promote equity, efficiency, and sustainability. *Water policy*, 4, 1-17.
- Rusconi, G. & Contrafatto, M. (2013). Corporate social accounting and accounts: a duty of accountability. *Impresa Progetto Electronic Journal of Management*, 2, 1-17.
- Russell, S., & Lewis, L. (2014). Accounting and accountability for fresh water. Exploring initiatives and innovations, Routledge, London, in Bebbington J., Unerman J., O'Dowyer B. Sustainability Accounting and Accountability, 213 - 229.
- Russell, S., & Thomson, I. (2009). Analysing the role of sustainable development indicators in accounting for and constructing a sustainable Scotland. *Accounting Forum*, 33, 225 - 244.
- Schaltegger, S., Beckmann, M. & Hansen, E.G. (2013). Transdisciplinarity in corporate sustainability: mapping the field. *Business Strategy and the Environment*, 22, 219-229.
- Shrivastava, P., Ivanaj, S. & Persson, S. (2013). Transdisciplinary study of sustainable enterprise. *Business Strategy and the Environment*, 22, 230-244.
- Tello, E., Hazelton, J., & Cummings, L. (2016). Potential users' perceptions of general purpose water accounting reports. Accounting, Auditing & Accountability Journal, 29(1), 80 -110.
- WBCSD (2012). Water for business: initiatives guiding sustainable water management in the private sector, Version 3, World Business Council for Sustainable Development, Geneva.
- WBCSD (2018). Global water tool, viewed 23 February 2018 <http://www.wbcsd.org/Clusters/Water/Resources/Global-Water-Tool.

Adesola Adebayo AKANDE is a senior lecturer in the department of Accounting & Finance, Elizade University, Ilara-mokin in Ondo State, Nigeria. He is an associate member of the Institute of Chartered Accountants of Nigeria, a Certified member of National Accountants of Nigeria. He bagged his Ph. D in Accounting from the Obafemi Awolowo University, Ile –Ife, Nigeria. He has many publications in accounting, finance and business related issues to his credit. He is married with Children.